SR 167 High Occupancy Toll (HOT) Lanes Pilot Project 8 Month Update

Paula J. Hammond, P.E. Secretary

David L. DyeDeputy Secretary

Steve Reinmuth
Chief of Staff

Craig Stone, P.E.

Urban Corridors Office Administrator

Washington State Transportation Commission February 18, 2009



Opening Day: May 3, 2008

Why HOT lanes on SR 167?

- Highly congested route
- HOV lanes underutilized
- Ability to provide drivers a new choice
- Test new technology





New Configuration

Single HOT lane in each direction

- HOT lane separated by double-white lines.
- Variable message signs indicate toll rate at each entry point.
- Pay a single toll to travel any distance on the 10-mile route.
- Free to buses and HOV 2+.





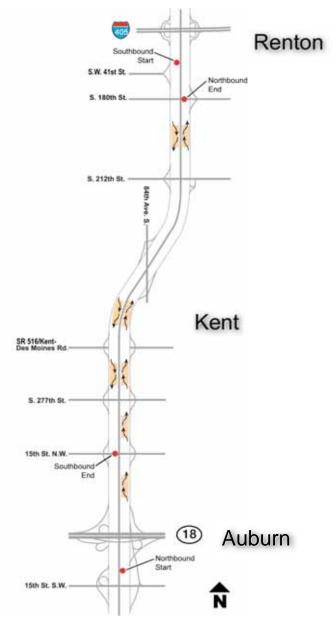
Pre-HOT lanes: SR 167 had two general purpose lanes and one HOV lane.



Post HOT lanes : HOV lanes were converted to a single HOT lane in each direction.

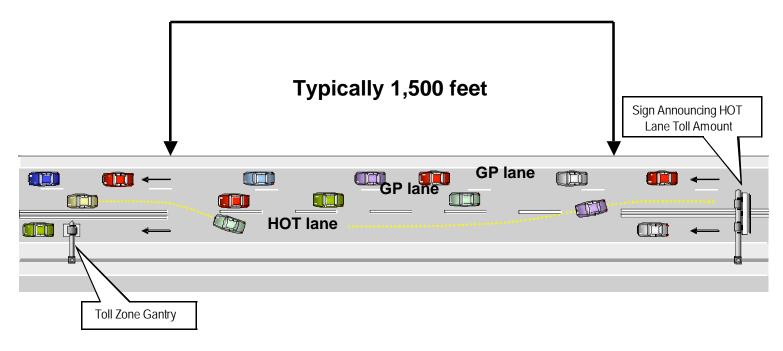
HOT Lanes Key Features

- Free flow operations goal for HOT lanes: at least 45 mph - 90% of the time during peak period.
- More than nine miles of HOT lanes southbound and 11 miles northbound.
- 10 access points.
- HOV 2+ and motorcycles toll-free.
- Operating during the day (typically tolled between 5 a.m. and 7 p.m.), open to all traffic at night.
- Variable tolls between 50¢ and \$9.
- Revenue will be used to pay for toll and roadway operations and maintenance, increased enforcement, and added incident response.



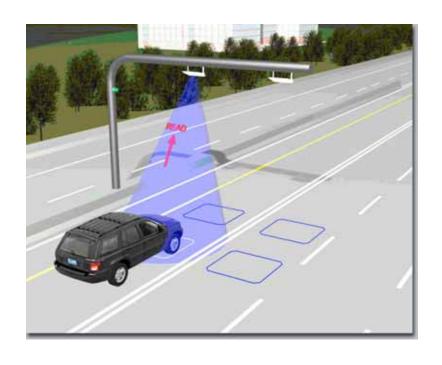
Access Points

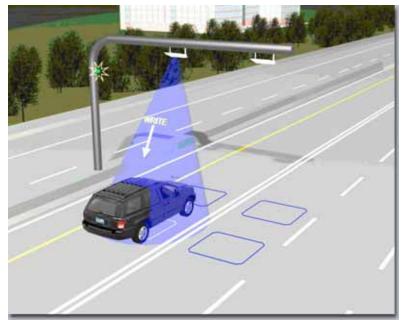
 Access points - defined locations for entering and exiting the HOT Lane.



- Tolls collected by electronic system
 - No toll booths
 - Same tolling transponder and customer service center as the Tacoma Narrows Bridge.

HOT Lane Transaction





Current Highlights

8 months after HOT lanes opened on SR 167—

- HOT lane operates at or above 45 mph 99.4% of the time during peak hours.
- More than 20,000 Good To Go! Users.
- No apparent safety impacts.
- Increasing peak-hour toll transactions.
- Decreased peak-hour travel times in both GP and HOT lanes.
- Transit ridership up nearly 25 percent.
- Available capacity remaining.





Travel Times

GP and HOT peak-hour travel times

HOT lane travel times

- NB Avg = 10.9 minutes
- NB 95th = 11.1 minutes
- SB Avg = 7.9 minutes
- SB 95th = 9.3 minutes

GP lane travel times

- NB Avg = 20 minutes
- NB 95th = 29.4 minutes
- SB Avg = 13 minutes
- SB 95th = 24.9 minutes



HOT lane savings

Users paid an average of \$1.25 to save 9.1 minutes in the NB HOT lane during the peak-hour.

Users paid an average of \$1.25 to save 5.1 minutes in the SB HOT lane during the peak-hour.

First 8 Months By The Numbers

SR 167 Average daily trips

	May	June	July	August	September	October	November	December
SR 167, 2007	122,000	122,000	124,000	126,000	121,000	116,000	114,400	115,960
SR 167, 2008	118,000	119,000	121,000	120,000	118,000	115,00	114,300	99,190
Percent Change	-3.4%	-2.5%	-2.5%	-4.8%	-2.5%	-0.9%	-0.1%	-14.5%

^{*} Average daily trips, Tuesday – Thursday at South 277th Street



Traffic Impacts

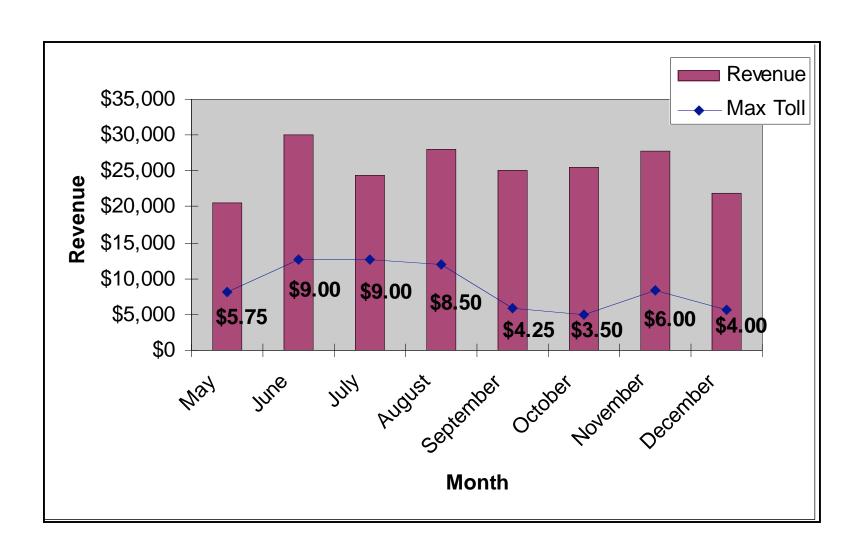
Average daily traffic

	May	June	July	August	Sept	Oct	Nov	Dec	Average
HOT Lane									
Total	17,210	17,710	19,030	18,500	16,900	15,200	16,200	14,200	16,869
Non-tolled	16,160	16,630	17,820	17,250	15,650	13,930	14,690	13,040	15,646
Tolled	1,050	1,080	1,210	1,250	1,250	1,270	1,510	1,160	1,223
Percent									
Tolled	6.1%	6.1%	6.4%	6.8%	7.4%	8.4%	9.3%	8.2%	7.3%
Data: Northwest Region Traffic Office, Tuesday - Thursday, May-December 2008									





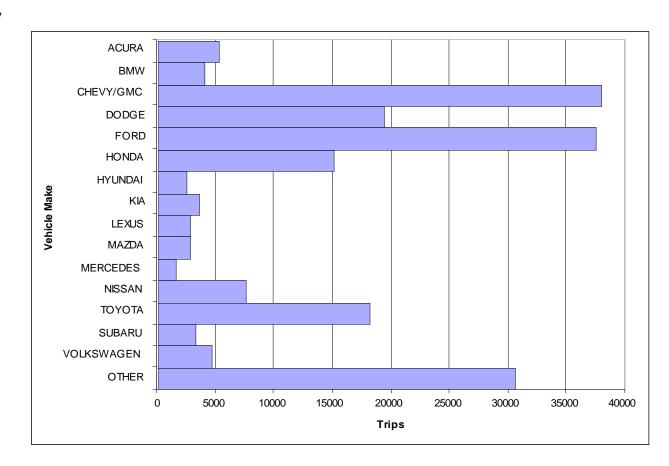
Monthly Revenue and Maximum Toll



Type of Vehicles Using The Lanes

Ten most frequently tolled vehicles in HOT lanes:

- 1. Chevrolet
- 2. Ford
- 3. Dodge
- 4. Toyota
- 5. Honda
- 6. Nissan
- 7. Acura
- 8. Volkswagen
- 9. BMW
- 10. Kia



HOT Lane Enforcement

Washington State Patrol

- Detection light effective
- 1,750 traffic stops
- 416 citations for HOV violations
- 209 crossing the double-white lines
- Compliance rate is estimated at 95 to 97 percent
- Violation revenue distributed amongst court, city, county, issuing agency

HERO program

- HERO reports involving SR 167 averaged:
 - 321 calls per month in 2007
 - 58 calls per month in 2008





Focus Group Results – January 2009

- Strong support for extension of HOT lanes.
- Traffic level and price point were the main HOT lane use decision factors.
- Avoiding traffic is more important than the cost of the transponder/tolls.
- Toll rates are fair.
- There are traffic problems entering and exiting the HOT lanes, as well as on the on and off-ramps.
- More signage and project education needed.



Issue Resolution

Issue

1. Access locations

2. Double white line

3. Carpool shields

4. Education & Outreach

Resolution

Increased length of access Added informational signing

WSP education effort Additional signing added

Evaluating new technology

Informational campaign Additional signing

' I'd give up all my lattes to use the HOT lanes. '

- SR 167 commuter





Next Steps

- Education and outreach
 - Addition of five educational signs
 - New phone number 1-888-G2G-WSDOT
 - 8 week campaign at service station
 - gas pump handles
- Continued monitoring
 - Comprehensive reports every 6 months
 - User survey planned May 2009
- Extension of SB SR 167 HOT Lane
 - Construction to begin in Spring 2013









Questions?

For more information on HOT lanes please contact:

Craig J. Stone, P.E.
Administrator
Urban Corridors Office
206.464.1222
stonec@wsdot.wa.gov

Patty Rubstello, P.E.
Tolling & Systems
Development Engineer
206.464.1299
rubstep@wsdot.wa.gov

Good To Go! wsdot.wa.gov/goodtogo

Pilot project Web page: wsdot.wa.gov/Projects/SR167/HOTLanes

